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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
DELCOTTO, GREGORY R				
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1796				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,361

Applicant(s)

SATO ET AL.

Examiner

Gregory R. Del Cotto

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 25-44 are pending. Claims 1-24 have been canceled. Applicant's amendment and arguments filed 7/1/09 have been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 3/30/09 have been withdrawn:

None.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25-30, 33-38, and 41-44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP11-180836, JP11-323380, JP7-331281, or JP11-323378.

'836 teaches a cosmetic, compatible with hair when applied containing 0.01 to 10% by weight of N-acylamino acid wherein the acyl chain contains from 8 to 22 carbon atoms, from 0.001 to 10% by weight of a neutral amino acid such as glycine, and as required, a nonionic surfactant. See Abstract. Specifically, '836 teaches compositions having a pH of 5.2.

'281 teaches a detergent composition containing an N-acylglycine or its salt (preferably having an acyl group of a palm kernel oil fatty acid or an acyl group of a coconut oil fatty acid) and one or more kinds of substances selected from an amino acid and a saccharide. The pH of the composition is from 6.5 to 9. See Abstract.

'380 teaches a solid detergent composition containing one or more N-acylamino acid salts selected from N-acylglycine, N-acylalanine, and N-acyl-beta-alanine and one or more selected from acidic amino acids and salts thereof. See Abstract. The pH of the composition is from 5 to 7. See column 1, lines 10-40.

'378 teaches a solid detergent composition containing at least one anionic surfactant selected from salts of N-acylamino acid, salts of acylisethionic acid, and salts of alkylsulfosuccinic acids; at least one wax; and at least one compound selected from

acidic amino acids and salts thereof. The pH of the composition is from 5 to 7. See column 1, lines 20-50.

Note that, the Examiner asserts that the N-acylamino acid surfactants and amino acid salts contained within the detergent compositions specifically taught by '836, '281, '380, or '378 will mix when used and inherently form the same surfactant as recited by the instant claims. '836, '281, '380, or '378 disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the broad teachings of '836, '281, '380, or '378 anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of '836, '281, '380, or '378 are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to formulate a surfactant composition having the same properties as recited by the instant claims because '836, '281, '380, or '378 teach that the types and amounts of components added to the composition may be varied.

Claims 31, 32, 39, and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP11-180836 or JP7-331281. Note that, a translation of each document has been received and included with this Office action.

'836 and 281 are relied upon as set forth above.

The Examiner asserts that the N-acylamino acid surfactants and amino acid salts contained within the detergent compositions specifically taught by '836 or 281 will mix

when used and inherently form the same surfactant as recited by the instant claims. '836 or 281 disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the broad teachings of '836 or '281 anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of '836 or '281 are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to formulate a surfactant composition having the same properties as recited by the instant claims because '836 or '281 teach that the types and amounts of components added to the composition may be varied.

Claims 25, 26, 30, 33-35, 38, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagashima et al (US 4,273,684).

Nakashima et al teach a transparent detergent bar possessing good forming power and detergency in hard water which is formulated consisting essentially of at least one salt of a N-long chain acyl-optically active acidic amino acid neutralized with a basic amino acid in the ratio of 1 mol of the former to 1 to 2 mols of the latter and water in the range of 5 to 35% based on the weight of the bar apart from water. Other adjuvants may be present. The pH value of the resultant composition is, for example, 5. See Abstract and column 5, line 40 to column 6, line 40. Nakashima et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Nakashima et al anticipate the material limitations of the instant claims.

Claims 25, 26, 30-35, and 38-41 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2000-265191, JP08-003585, or Yoshihara et al (US 5,616,552).

'191 teaches a washing agent that has excellent selective washing function and safety without causing skin roughening and irritation by formulating a specific N-acylalanine salt in the composition. More specifically, '191 teaches a washing agent containing a salt of N-lauroylalanate in an amount of 2 to 30% by weight, another anionic surfactant such as N-acylglutamate salt and an amphoteric surfactant of the carbobetaine type. See Abstract. The counterion of the N-lauroylalanate can be alkali metal salts, a monoethanolamine salt, L-lysine salt, L-arginine salt, etc. Additional anionic surfactants N-acyl methyl taurate, N-acyl isethionic acid salt, N-acyl glycine salt, an alkyl sulfonate, etc. See paras. 7 and 8. Additionally, other components may be used such as thickeners, nonionic surfactants such as saccharides, polyhydric alcohols such as glycerol, diglycerol, 1,3-butylene glycol, polyethylene glycol, hydroxyethylcellulose, perfumes, antiseptics, olive oil, etc. The cleaning agent may be in the shape of a powder, solid, etc. See para. 13.

'585 teaches a detergent composition containing an N-acylalanine salt such as N-lauroyl alanine, a C8-C22 higher fatty acid salt such as sodium laurate, and one or more surfactants. See Abstract. The counterion of the N-acylalanine salt may be sodium, potassium, a lysine, an arginine, etc. See para. 11. Suitable additional surfactants include N-acyl amino acids wherein suitable amino acids include glycine, leucine, glutamic acid, aspartic acid, etc. See paras. 15-19. Additionally, the

compositions may contain additional anionic surfactants such as alpha olefin sulfonates, an alkyl sulfonate, alkylbenzene sulfonates, an isethionic acid fatty-acid ester salt, alkyl sulfate, etc. See paras. 20-27. Amphoteric surfactants such as betaines may also be used in the compositions. See paras. 52-57. Additionally, the compositions may contain other components such as ethylene glycol, propylene glycol, 1,3-butylene glycol; moisturizers such as glycerol, and sorbitol, methyl cellulose, hydroxyethyl cellulose; cationized cellulose, hydrocarbons such as vaseline; cetyl alcohol, etc. The compositions may be in the form of a liquid, paste, solid-state, powdered, etc. See paras. 58 and 59.

Yoshihara et al teach a detergent composition containing N-acylthreonine salt in which the acyl group is a fatty acid residue having 8-22 carbon atoms and higher fatty acid salt having 8 to 22 carbon atoms and also a detergent composition which further contains another surface-active agent. See Abstract. Examples of suitable surface-active agents include anionic surfactants such as N-acylamino carboxylates wherein the acyl group is an acyl residue of a fatty acid having 8 to 22 carbon atoms, the amino acids may be glutamic acid, alanine, etc., and the counterion may be sodium, potassium, lysine, arginine, etc. Other anionic surfactants include sulfonate-type, sulfate-type, etc. Additional surfactants include cationic surfactants, nonionic surfactants, and amphoteric surfactants. See column 3, line 5 to column 4, line 65. There is no particular limit in terms of the form of the detergent in the detergent composition and any of the forms of liquid paste, gel, solid, powder, etc., may be adopted.

Other components may also be added to the compositions including polyhydric alcohols such as diglycerol, diethylene glycol, ethylene glycol, etc.; polymers such as methyl cellulose, hydroxyethylcellulose, nitrocellulose, polyvinyl alcohol, crystalline cellulose, silicone oils, chitin, inorganic salts, chelating agents such as ethylene diamine tetraacetic acid, citric acid, etc. See column 7, line 35 to column 8, line 55.

The Examiner asserts that the N-acylamino acid surfactants as specifically by '191, '585, and Yoshihara et al would inherently have the same properties as the surfactants recited by the instant claims because '191, '585, and Yoshihara et al teach surfactants containing the same N-acylamino acid and same counteranion as recited by the instant claims. '191, '585, or Yoshihara et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the broad teachings of '191, '585, or Yoshihara et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of '191, '585, or Yoshihara et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to formulate a surfactant composition having the same properties as recited by the instant claims because '191, '585, or Yoshihara et al teach that the types and amounts of required components added to the composition may be varied.

Response to Arguments

With respect to the cited art and more specifically, JP 11180836, JP 7331281, JP 11-323378, JP 11-323380, JP 2000-265191, JP08-003585, and Yoshihara et al (US

Applicant states that the claimed invention is drawn to a surfactant having an unbalanced ratio of dissolved substances that provides an unexpected benefit. Further, Applicant states that the argument on page 6 of the Office action mailed 3/30/09 which states that "will mixed when used and inherently form the same surfactant as recited" does not cover the claimed invention because although some of the individual pairings in the dissolved product arguably are found in the cited art, much are not, and it is this imbalance that is claimed. In response, first note that, the Examiner would like to point out that Applicant has made no specific arguments or remarks with respect to Nagashima et al (US 4,273,684). As stated previously, the Examiner maintains that the instant claims simply require an ion-pair surfactant salt of an acylamino acid and alkali salt of an amino acid which is formed by blending the two components together (See para. 50 of the instant specification). Further, the Examiner maintains that '261, '380, '378, '836, '191, '585, or Yoshihara et al teach blending an acylamino acid and alkali salt of an amino acid, in various amounts, which is the same as recited by the instant claims, and that an unbalanced ion pair surfactant would inherently form from such a mixture of the two components. Further, note that, as stated previously, once a reference teaching a product appearing to be substantially identical is made the basis of a rejection and the Examiner presents evidence or reasoning tending to show inherency, the burden shifts to the applicant to show an unobvious difference. See MPEP 2111. The Examiner has provided technical reasoning which tends to show the inherency of the claimed subject matter and Applicant has provided no data which shows that the products disclosed by the prior art of record are not inherently the same

as recited by the instant claims. Thus, the Examiner maintains that the prior art of record is sufficient to anticipate the material limitations of the instant claims under 35 USC 102.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory R. Del Cotto/
Primary Examiner, Art Unit 1796

/G. R. D./
November 9, 2009